

Abstract of the Disclosure**A Lateral Thyristor Structure for Protection Against Electrostatic Discharge**

To protect against electrostatic discharges in monolithic integrated circuits in CMOS technology, a lateral thyristor structure is presented which has a much lower firing voltage compared to conventional thyristor structures.

Figure 3

List of Reference Symbols

- 1 Supply connection
- 2 Supply connection
- 3 Input/output
- 4 Interior circuit
- 5 Clamping circuit
- 6 Clamping circuit
- 7 Diode
- 8 Connecting line
- 9 Resistor
- 10 Weakly p-doped semiconductor substrate
- 11 Weakly n-doped well region
- 12 Strongly n-doped region
- 13 Strongly p-doped region
- 14 Strongly n-doped region
- 15 Field oxide region
- 16 Cathode
- 17 Anode
- 18 Field oxide region
- 20 Weakly p-doped semiconductor substrate
- 21 Weakly n-doped well region
- 22 Strongly n-doped region
- 23 Strongly p-doped region
- 24 Strongly n-doped region
- 25 Strongly n-doped region
- 26 Cathode
- 27 Anode
- 28 Field oxide region
- 29 Field oxide region
- 30 Field oxide region
- 21' Weakly n-doped well region
- 22' Strongly n-doped region
- 23' Strongly p-doped region
- 24' Strongly n-doped region
- 25' Strongly n-doped region

- 27' Anode
- 28' Field oxide region
- 29' Field oxide region
- 30' Field oxide region
- 31 Substrate contact ring
- 32 Terminal
- 40 Internal connection
- 41 Strongly n-doped region
- 42 Thyristor